

REMARKS

Claims 1-34 are pending in this application. By this Amendment, replacements sheets are provided and new claims 27-34 are added.

The Office Action rejects claims 1-7, 9-11 and 22-26 under 35 U.S.C. §103(a) over U.S. Patent 6,218,876 to Sung et al. (hereafter Sung) in view of U.S. Patent 6,570,456 to Mano et al. (hereafter Mano). The Office Action rejects claim 8 under 35 U.S.C. §103(a) over Sung and Mano and further in view of U.S. Patent 6,816,019 to Delbo et al. (hereafter Delbo). The Office Action also rejects claim 12 under 35 U.S.C. §102(e) by Japanese Patent 02003298417A to Sato. The Office Action rejects claims 13-18 and 20-21 under 35 U.S.C. §103(a) over Sato in view of Sung. The Office Action further rejects claim 19 under 35 U.S.C. §103(a) over Sato in view of Mano, and further in view of Delbo. The rejections are respectfully traversed.

Independent claim 1 recites a first phase lock loop device to be powered by a first power supply voltage and a second phase lock loop device, coupled to the first phase lock loop device, to be powered by the first power supply voltage and a second power supply voltage, the second phase lock loop device to output a clock signal having an adaptive frequency based on the second power supply voltage.

The applied references do not teach or suggest all the features of independent claim 1. That is, the Office Action appears to rely on a combination of Sung and Mano to find the features of independent claim 1. That is, the Office Action appears to suggest that Sung discloses a first phase lock loop device 52 and a second phase lock loop device 54. The Office

Action agrees that Sung does not disclose first and second phase lock loop devices with first and second power supply voltages. The Office Action then appears to rely on Mano as disclosing a phase lock loop with first and second power supply voltages. However, Mano does not teach or suggest these features.

Mano merely describes that a bias control circuit B11 may transfer a bias voltage V11 to a supply line PS according to a control voltage produced by a charge pump/low pass filter CPLP1. See Mano's FIG. 1 and col. 7, lines 5-8. The bias voltage V11 does not correspond to a power supply voltage or to the claimed phase lock loop device to be powered by a power supply voltage. Bias voltages V21 and V22 also do not correspond to power supply voltages.

The Office Action then appears to state that Sung and Mano disclose a first phase lock loop device to be powered by a first power supply voltage Vdd and a second phase lock loop device to be powered by the first power supply voltage Vdd and a second power supply voltage V11. The Office Action states that Vdd is not shown in the references but it is inherent for a phase lock loop to be powered by a power supply voltage. That is, the Office Action appears to state without any basis that Mano's second phase-locked loop L21 is powered by both a Vdd and V11. Applicants respectfully submit that this is not correct. Sung, as admitted in the Office Action, does not suggest the first and second power supply voltage. Mano's bias voltage V11 is not a power supply voltage but rather is a bias voltage. Accordingly, the two references do not suggest the two power supply voltages. Applicants also respectfully submit that the Office Action incorrectly states that Vdd is inherently provided for a PLL, as there is no suggestion in

the references for these features. Vdd is not inherently provided to power a power supply when another power supply is already provided. Applicants respectfully submit that to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily in the reference. Inherency may not be established by probabilities or possibilities. See *In re Robinson*, 49 USPQ2d 1949, 195-051 (Fed. Cir. 1999) and M.P.E.P. §2112(IV). This is not true in the cited combination. Therefore, applicants respectfully submit that the Patent Office should provide proof and/or further references to show the inherency of the claimed two power supply voltages. In the absence of this showing, applicants respectfully submit that the combination of Sung and Mano does not teach or suggest the features of independent claim 1. Thus, independent claim 1 defines patentable subject matter.

Independent claim 22 defines patentable subject matter for at least similar reasons as independent claim 1.

Independent claim 12 also defines patentable subject matter. That is, independent claim 12 recites an adaptive phase lock loop device powered by an analog power supply voltage and a digital power supply voltage, the adaptive phase lock loop device to receive a first clock signal and to output a second clock signal having an adaptive frequency based on a voltage of the digital power supply voltage.

The Office Action states that Sato's Figure 1 discloses the claimed features. However, Sato's Figure 1 shows a crystal oscillator 4 that provides a signal to the a PLL1 and a second PLL2. Based on channel data 8A to the first PLL1, an output signal 9A may be provided from

the first PLL1. Similarly, based on channel data 8B to the second PLL2, an output signal 9B may be provided from the second PLL2. It is respectfully submitted that the output signals 9A and 9B correspond to output signals having a specific frequency for radio equipment. It is respectfully submitted that these output signals do not correspond to the claimed first and second clock signals. Thus, Sato does not teach or suggest an adaptive phase lock loop device to output a second clock signal having an adaptive frequency based on a voltage of the digital power supply voltage. Accordingly, independent claim 12 defines patentable subject matter at least for this reason.

For at least these reasons, each of independent claims 1, 12 and 22 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, each of the dependent claims recites features that further and independently distinguish over the applied references.

For example, dependent claim 2 recites the first power supply voltage comprises an analog voltage and the second power supply voltage comprises a digital voltage. The Office Action states that Sung and Mano disclose these features. However, for at least similar reasons as set forth above, these references do not teach or suggest the analog voltage and the digital voltage. The Office Action does not provide references to show these features and these features are not inherent. Accordingly, dependent claim 2 defines patentable subject matter at least for this reason.

Furthermore, dependent claim 5 recites the second phase lock loop device includes components powered by the first power supply voltage and components powered by the second power supply voltage. The Office Action states that Sung and Mano disclose these features. However, the applied references do not teach or suggest these features for at least the reasons set forth above.

Furthermore, dependent claim 13 recites a fixed phase lock loop device powered by the analog power supply voltage, the fixed phase lock loop device to receive a reference clock signal and to provide the first clock signal to the adaptive phase lock loop device. The Office Action appears to make a combination of Sung and Sato for these features. However, there is no suggestion to modify Sato to include Sung's alleged serial connected PLL devices. That is, Sato clearly relates to radio communications in which output signals 9A and 9B are provided based on a crystal oscillator 4. There is no suggestion for how to combine serially connected PLL devices as alleged in the Office Action. Thus, dependent claim 13 defines patentable subject matter at least for this additional reason.

Additionally, dependent claim 33 recites the first phase lock loop device includes a first bias circuit and a first voltage controlled oscillator, the first bias circuit to provide a bias voltage to the first voltage controlled oscillator, and the bias voltage being different than the first and second power supply voltages. The applied references do not teach or suggest these features. For example, Mano's bias voltage V11 is output from a bias circuit B11 to a voltage controlled oscillator V11. Thus, Mano and Sung do not suggest the claimed power supply voltage (in

Serial No. 10/813,551
Reply to Office Action dated June 17, 2005

Docket No. INTEL-0054

combination with the other features of dependent claim 33). Similarly, the applied references do not support the features of dependent claims 28, 29 and 34. Thus, dependent claims 28-29 and 33-34 define patentable subject matter at least for this additional reason.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-34 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, David C. Oren, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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Serial No. 10/813,551
Reply to Office Action dated June 17, 2005

Docket No. INTEL-0054

Amendments to the Drawings:

The attached drawings are replacement sheets for FIGS. 1-10. The replacement sheets are formal drawings in further conformance with Patent Office practice. These sheets, which include Figs. 1-10, replace the original sheets including Figs. 1-10. No annotated sheets have been provided.

Attachment: Replacement Sheets